METHOD OF PRODUCING AND ASSEMBLING A COOLING DEVICE INSIDE AN AXIAL-FLOW GAS TURBINE BLADE, AND AXIAL-FLOW GAS TURBINE BLADE PRODUCED USING SUCH A METHOD

Abstract

A method of producing and assembling a cooling device inside an axial-flow gas turbine blade; the airfoil profile of the blade has an inner surface defining a chamber, and is connected to a supporting structure by two opposite end pins having respective openings for the passage of cooling air and which come out inside the chamber; the method provides for forming an insert having a number of holes and defined by a first and at least a second body separate from each other, and each of a size approximating but no larger than that of at least one of the openings; the bodies are inserted successively through the openings in the pins, and are positioned inside the chamber to direct a relative stream of air through each hole on to the inner surface of the airfoil profile.